

TECHNICIAN GUIDE TO RANGE SITES AND RANGE CONDITION  
KEY CLIMAX PLANTS AND OTHERS THAT INVADE

Key Climax Plants	WL	Sb	Ov	Ly	CU	DC	SSt	SLy	SwLy	SwI	St	VS	Ig
Basin wildrve			10d										
Big bluegrass				10d									10d
Blue wildrve			15d	10d									
Bluebunch wheatgrass			15d	35d		35d	35d	35d	45d	35d	45d	40d	
Columbia needlegrass			15d	25d		20d							
Idaho fescue			10	25	15	20	10d	20d	25d		10d	10d	
Mountain bromegrass			15d	15d									
Nebraska sedge	25d	10d											
Northern reedgrass	25d												
Rhizomatous wheatgrass			20		30	10	20		15		10		
Slender wheatgrass		15d	10d			15d	20d	10d	20d	25d	25d	10d	
Spike fescue													
Spike trisetum													10
Timber ganthonia													
Tufted hairgrass	25	15	15										
Other native perennial			20	20	20	20	20	20	20	20	20	20	20
grasses & sedges 1/			20	20	20	20	20	20	20	20	20	20	20
1/Perennial Forbs	15	20	20	20	15	15	10	15	10	10	10	15	
Big sagebrush				10	10								
Bitterbrush					20d				10d	15d	10d	10d	
Black sagebrush										10		10	
Low sagebrush													
Mountainmahogany							15d						
Three-tip sagebrush													10
Other native													
shrubs-trees 1/	15	15	15	15	10	10	10	25	10	15	15	15	15

RANGE CONDITION (%) : SUGGESTED INITIAL STOCKING RATES BY SITE (AUM'S/ACRE)  
Excellent 76-100 : 3.5: 2.3: 1.0: .8 : .7 : .7 : .7 : .6 : .55 : .5 : .35: .3 :  
Good 51-75 : 3.0: 1.8: .8 : .65: .55: .55: .55: .55: .5 : .45 : .4 : .27: .25:  
Fair 26-75 : 1.8: 1.2: .45: .35: .3 : .3 : .3 : .3 : .25 : .22 : .2 : .15: .12:  
Poor 1-25 : 1.2: .8: .25: .2 : .17: .17: .17: .17: .15 : .13 : .12: .08: .06:

LEGEND: 1/ Count no more than 5% of any one species. Blanks = Not Important.  
d = Decreaser with livestock use on this site.

Invaders: All annuals & exotics, broom snakeweed, common dandelion, foxtail barley, goatsbeard

Abbreviations: WL = Wetland CU = Coarse Upland SwLy = Shallow Loamy  
Sb = Subirrigated DC = Dense Clay SwI = Shallow Igneous  
Ov = Overflow SSt = Steep Stony St = Stony VS = Very Shallow  
Ly = Loamy SLy = Steep Loamy Ig = Igneous

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Major Land Resource Area (43,46,48A,49)  
20"+ High Mountains (20+M)

CLIMATE

Precipitation is fairly evenly distributed through the year and averages over 20 inches. Snows are heavy and remain in place fairly well during the winter. Annual snowfall averages 150 to 200 inches. Summer precipitation is in the form of showers, while both showers and steady precipitation are noted in spring and fall.

MONTH	AVG. TEMP. (F)	AVG. PRECP. (INCH)
-----	-----	-----
January	12.7	4.26
February	18.8	2.67
March	24.5	2.84
April	36.0	2.70
May	46.1	2.34
June	52.6	2.75
July	60.1	1.09
August	58.3	1.47
September	50.8	1.87
October	41 .4	1 .84
November	27.1	2.85
December	18.4	3.49
Avg. Annual	37.2	29.91

The above data is a 30-year average collected at the following climate recording stations: Alta, Bedford, Moran and Bondurant.

Plant growth begins about June 1 at lower elevations and as late as July 15 at higher elevations and continues to snowfall, usually about October 10 to 20. Temperatures show a wide range between summer and winter and daily maximums and minimums. This is predominantly due to high elevation and dry air which permits rapid incoming and outgoing radiation. In the passage of both warm and cold masses, a dependable freeze-free period is not noted for the area. Freezing temperatures can occur any month during the year.

Because of the varied topography, the wind will vary considerably for different parts of the area. The wind is usually much lighter at the lower elevations and in the valleys as compared with the higher terrain. The average wind velocity is higher during the winter months than summer. The higher wind velocity generally occurs in the southeast portion of the state.

Sunshine is quite abundant with the latter part of summer being quite sunny. During this period, the area averages 70-75 percent sunshine. Winter sunshine averages about 40 percent.

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Relative humidities average comparably low during the year and are estimated at 55%. They range from 70% during winter months to about 35% in July and August. Daily winter ranges are estimated at 75% in early morning and 55% in the heat of the day. During the summer, the range is 60% to 20% for the same time periods.

AVERAGE MOISTURE DEPLETION THROUGH EVAPOTRANSPIRATION

Inches of Water Available  
In the Soil Profile (Water  
Holding Capacity)

Date of Water Depletion  
(Plant Wilting Point)

1	June	12
2	July	1
3	July	10
4	July	19
5	July	27
6	Aug.	6
7	Aug.	17
8	Aug.	29
9	Sept.	13

The above data reflects averages of normal precipitation and temperatures for the period.

The above were recorded at climate recording stations in Alta, Bedford, and Moran.

WILDLIFE

This zone is characterized by the following wildlife species: Moose, elk, mule deer, black and grizzly bear, mountain sheep, snowshoe rabbit, coyote, mountain lion, badger, bobcat, beaver, blue and ruffed grouse, hawks, owls, and eagles.

Migratory species such as elk, mule deer and mountain sheep utilize these range sites for spring, summer and fall forage. Generally, elk are the dominant big game species. Hawks and eagles frequent this zone seasonally. Species such as bear, marmots and pika are yearlong residents. In some mountain ranges, moose, mountain sheep and mountain goat are established in this zone. In some mountain ranges, this zone provides potential habitat for these species where their niche is not fully occupied. Threatened or endangered species that may occupy this zone include grizzly bear, peregrine falcon, bald eagle and gray wolf. The Kendall warm springs dace is known to occur in the upper tributaries of the Green river.



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Tall mannagrass	2	3	2	3	2	• 2
Thickspike						
wheatgrass	2	2	2	1	2	2
Timber danthonia	2	2	2	3	3	
Tufted hairgrass	1	1	1	2	2	2
Western needlegrass 1		1	2	2	2	2
Western wheatgrass 2		2	2	1	2	3
Williams needlegrass1		1	2	2	2	2
Forbs						
-----						
Agoseris	2	1	2	1	2	1
American vetch	1	1	1	1	1	1
American bistort	2	2	2	2	2	2
American licorice	3	3	3	3	3	3
Arrowgrass						
Aster	3	3	3	1	3	
Blue-eyed grass	2	1	2	2	2	
Bluebells	2	2	2	2	2	2
Balsamroot	1	1	1	1	1	1
Biscuitroot	2	2	3	2	2	
Bluebells	2	2	2	2	2	2
Buckwheat	3	2	3	3	3	
Buttercup	2	2	2	2	2	3
Clovers	1	1	1	1	1	2
Columbine	2	2	2	2	2	2
Coneflower	3	3	3	3	3	3
Cow parsnip	1	1	1	1	1	1
Deathcamas						
Elephanthead	3	2	3	2	3	3
Eriogonums	3	2	3	1	3	
False solomonseal	3	3	3	3	3	
Fireweed	1	2	3	1	2	1
Flax	3	3	3	3	3	
Fleabane	2	2	2	2	2	
Geranium	1	2	2	1	2	2
Geum	3	3	3	3		
Goldenpea	3	3	3	3	3	3
Goldenrod	3	3	3	3	3	
Green gentian	2	2	2	2	2	2
Gromwell	3	3	3	3	3	3
Groundsel	3	3	3	3	3	3
Harebell	3	3	3	3	3	
Hawksbeard	3	1	3	2	2	
Herbaceous sage	3	3	3	3	3	
Horsemint	2	2	3	2	2	
Horsetails	3	3	3	3	3	
Iris	3	3	3	3	3	3
Larkspur (b)	2	2	2	2	1	
Little sunflower	1	1	1	1	1	1
Locoweed						
Lomatium	2	2	2	2	2	
Lousewort	3	3	3	3	3	
Lupine (c)	2	2	2	2	2	

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20"+ High Mountains (20+M)

Meadowrue	2	1	2	1	1		
Milkvetch	2	2	2	2	2		
Minerscandle	3	3	3	3	3	3	3
Mint	3	3	3	3	3		<b>3</b>
Monkshood							
Mulesear	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>		
Mustard	3	3	3	3	3		
Onion	2	2	2	2	1		
Oregon grape	2	2	3	1	3		
Owl clover	3	3	3	3	3		
Paintbrush	2	2	2	2	2		
Peavine	2	2	2	2	2		
Penstemons	1	1	1	1	1		
Phacelia	2	2	2	2	2		
Phlox	3	3	3	1	3		
Plantain	3	3	3	<b>3</b>	<b>3</b>		<b>3</b>
Pointvetch	3	3	3	3	3		3
Primrose	3	3	3	<b>3</b>	<b>3</b>		
Pussytoes	<b>3</b>	3	3	1	3		
Sandwort	3	3	<b>3</b>	3	3		
Shootingstar	2	2	<b>3</b>	2	3		3
Silky phacelia	2	2	2	2	2		
Starwort	3	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>		
Stonecrop	3	3	3	3	3		
Stoneseed	3	3	3	3	3		
Sunflower	1	1	1	1	1		1
Sweetroot	2	2	2	2	2		
Toadflax	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>		
Valeriana	2	1	2	2	2		
Violets	2	2	2	2	2		
Water hemlock							
Waterleaf	2	2	2	1	2		2
Western coneflower	<b>3</b>	3	3	3	3		
Western yarrow	3	3	3	1	<b>3</b>		
Wild Lily-of-Valley 2		3	3	3	3		
Yellow sneezeweed							
Woody Plants							
-----							
Big sagebrush	2	2	3	2	2		
<b>True</b>							
mountainmahogany	2	1	<b>3</b>	<b>1</b>	<b>3</b>		<b>1</b>
Bitterbrush	1	1	2	1	1	1	1
Black sagebrush	<b>3</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>1</b>		
Bog kalmia							
Chokecherry (d)	2	2	2	1	3	1	2
Current	2	2	2	1	3	2	2
Honeysuckle	3	2	3	2	3	1	
Low rabbitbrush	2	2	3	1	1		2
Low sagebrush	2	2	3	2	2		
Mountain ash (e)	2	2	2	2	2	1	
Prostrate juniper	3	3	3	1	<b>3</b>		
Rose	2	2	2	1	2		2
Rubber rabbitbrush	<b>3</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>1</b>		

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20"+ High Mountains (20+M)

Serviceberry	2	1	3	1	3	1	2
Shrubby cinquefoil	3	3	3	3	3		1
Silver buffaloberry	3	3	3	1	3		
Silver sagebrush	2	2	2	1	1		
Snowberry	3	3	3	1	1		
Snowbrush ceanothus	1	2	2	1	3	1	2
Three-tip sagebrush	3	2	3	3	2		
Water birch	3	3	3	3	3	2	
Willows:							
Blueberry	1	1	2	1	3	1	1
Drummonds	1	1	2	1	3	1	1
Geyer s	1	1	2	1	3	1	2
Interior	1	1	2	1	3	1	2
Wolfs	1	1	2	1	3	1	2

- (a) In large amounts.
- (b) Poisonous in spring before flowering.
- (c) May be poisonous after seedpods mature.
- (d) Leaves are poisonous to sheep and cattle.
- (e) Young shoots are poisonous.

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Major Land Resource Area (43,46,48A,49)  
20"+High Mountains (20+M)  
WETLAND WL  
Correlated Range Site No-043XY178WY

RANGE SITE DESCRIPTION

A. PHYSICAL CHARACTERISTICS

1. Physiographic Features -This site occurs on level to gently sloping land near springs, seeps, and sloughs. It is found on all exposures. Slopes vary from 0-10%, but most commonly are less than 30. The elevation ranges from 8,200 to over 12,000 feet.

2. Climatic Features - See attached climatic description.

3. Native (climax) Vegetation

a. The climax plant community is dominated by plants that can withstand long periods of submersion in water. Potential vegetation is about 70% grasses and grass-like plants, 15% forbs and 15% woody plants.

b. Plant species and percentages found in the climax plant community by air-dry weight are:

SPECIES	PERCENT
Grasses and Grass-like Plants	
Nebraska sedge	10-25
Northern reedgrass	10-25
Tufted hairgrass	15-25
All following Grasses and Grass-like Plants	10-20*
Bearded wheatgrass	Big bluegrass
Blue wildrye	Bluejoint reedgrass
Common reedgrass	Dunehead sedge
Inland sedge	Mountain brome
Alpine timothy	Nodding brome
American mannagrass	Slim sedge
Tall mannagrass	Baltic rush
Forbs	
All following Forbs	5-15*
American bistort	Arrowgrass
Bluebells	Blue-eyed grass
Columbine	Elephanthead
Groundsel	Horsetails
Iris	Monkshood
Waterleaf	Water hemlock
Western coneflower	



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20"+ High Mountains (20+M)  
Woody Plants

All following Woody Plants

5-15\*

Bog kalmia

Current

Rose

Water birch

Willows

\*Of plants in these groups, no more than 5% of any species is allowable in the potential plant community.

c. Density of herbage cover by ocular estimate may vary from 85 to 100 percent.

d. Species that are not a part of the climax plant community, but are most likely to invade this site if condition declines are annual grasses, annual forbs, cocklebur, curlycup gumweed, foxtail, povertyweed and thistle. Willows, low growing sedges and rushes become more dominant as conditions deteriorate.

4. Total Annual Production in Excellent Condition (Pounds per Acre Air-dry Weight)

Favorable years	- 7,500
Medium years	- 6,500
Unfavorable years	- 5,500

5. Soils:

a. The soils of this site are deep and poorly drained, with water tables above the surface for part but not all of the growing season. They are nearly level to slightly depressed areas with poor surface drainage. Surface soils are generally dark colored and high in organic content. Textures of these soils range from moderately coarse to fine and are most commonly medium and moderately fine.

b. Soil taxonomic units which characterize this site are:

c. Complete soils descriptions are available in the soil survey descriptive legend.

B. MAJOR USES AND INTERPRETATIONS FOR:

1. Grazing - The potential vegetation of this site consists primarily of water tolerant grasses, and grass-like plants, with a small percentage of water tolerant forbs, and a small percentage of water tolerant woody plants. It is valuable for spring, summer, and fall use by all forms of domestic livestock.

2. Wood Products - None.

3. Wildlife - See attached description. This site is particularly valuable habitat for moose.

4. Watershed (Hydrologic Interpretations)-This range site has a potential for high runoff. The soil cover complex numbers are:

Excellent	95
Good - high fair	95
Fair	95

(See Section 4, SCS National Engineering Handbook for runoff quantities and hydrologic curves.)

5. Recreation and Natural Beauty- This site has a small percent of forbs which have flowers and bloom in the spring and summer, those most showy being elephanthead, monkshood, iris, and columbine. It is a good to excellent area for moose, elk, and deer hunting. In regions of high snow, it has high potential for skiing and snowmobiling.

6. Threatened or endangered plants and animals - See wildlife description.

7. Location of Typical Examples of This Site (To be determined at the local field offices.)

8. Other Pertinent Information

#### GUIDE TO SUGGESTED INITIAL STOCKING RATE

Condition Class Percent Climax Vegetation AUM's/Acre Acres/AUM

Excellent	76 - 100	3.5	.29
Good	50 - 75	3.0	.33
Fair	26 - 50	1.8	.56
Poor	0 - 25	1.2	.83

RELATIVE FORAGE QUALITY OF PLANTS FOR ANIMAL USE-(See Attached Sheet)

9. Field Offices - Afton, Baggs, Buffalo, Casper, Cody, Cokeville, Douglas, Dubois, Greybull, Jackson, Kaycee, Lander, Laramie, Lovell, Pinedale, Powell, Riverton, Saratoga, Sheridan, Thermopolis, Worland

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Major Land Resource Area (43,46,48A,49)  
20"+ High Mountains (20+M)  
SUBIRRIGATED Sb  
Correlated Range Site No-043XY174WY

RANGE SITE DESCRIPTION

A. PHYSICAL CHARACTERISTICS

1. Physiographic Features -This site will usually occur on level to nearly level land along perennial or intermittent streams and near seeps, springs, and sloughs. It is found on all exposures. Slopes vary from 1-10%. The average is 3%. The elevation ranges from 8,200 to over 12,000 feet.

2. Climatic Features - See attached climatic description.

3. Native (climax) Vegetation

a. The climax plant community is dominated by plant species that can benefit from a high water table. Potential vegetation is about 65% grasses and grass-like plants, 20,% forbs, and 15% woody plants.

b. Plant species and percentages found in the climax plant community by air-dry weight are:

SPECIES	PERCENT
Grasses and Grass-like Plants	
Slender wheatgrass	5-15
Mountain brome	5-15
Tufted hairgrass	5-15
Blue wildrye	5-15
Basin wildrye	5-10
Nebraska sedge	5-10
All Following Grasses and Grass-like Plants	10-20*
Columbia needlegrass	Dunehead sedge
Inland sedge	Nodding brome
Northern reedgrass	Redtop bentgrass
Spike trisetum	Tall mannagrass
Alpine timothy	Baltic rush
Bearded wheatgrass	Big bluegrass
Canby bluegrass	Western wheatgrass
Forbs	
All following Forbs	10-20*
American bistort	American licorice
Arrowgrass	
Aster	Buttercup
	Clovers
Cow parsnip	Elephanthead
	Flax
Goldenpea	Goldenrod
	Groundsel
Horsetails	Iris
	Milkvetch
Mint	Plantain
	Pointvetch

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Shooting star	Sweetroot	Violets	
Water hemlock	Waterleaf	Western yarrow	
Woody Plants			
All following Woody Plants			5-15*
Chokecherry	Rose		
Shrubby cinquefoil	Water birch		
Willows			

\*Of plants in these groups, no more than 5% of any species is allowable in the potential plant community.

c. Density of herbage cover by ocular estimate may vary from 85 to 100 percent.

d. Species that are not a part of the climax plant community, but are most likely to invade this site if condition declines are annual grasses, annual weeds, cocklebur, curlycup gumweed, foxtail, povertyweed, bedstraw, rumex, and bull thistle. Willows, low growing sedges, and rushes become more dominant as conditions deteriorate.

4. Total Annual Production in Excellent Condition (Pounds per Acre Air-dry Weight)

Favorable years	- 6,000
Medium years	- 5,000
Unfavorable years	- 4,000

5. Soils:

a. The soils in this site are deep and affected by wetness. The water table fluctuates during the growing season, generally above 20 inches. The soils of this site have a non-saline and/or non-alkaline water table. Surface soil is usually deep and has high content of organic matter. Mottling or gleying usually occurs within 20 to 40 inches of the surface. Textures of these soils range from moderately coarse to fine and are most commonly medium and moderately fine.

b. Soil taxonomic units which characterize this site are:

c. Complete soils descriptions are available in the soil survey descriptive legend.

B. MAJOR USES AND INTERPRETATIONS FOR:

1. Grazing - This site consists primarily of water tolerant grasses & grass-like plants with a small percentage of water tolerant forbs. It is valuable for summer and fall use for all forms of domestic livestock.

2. Wood Products - None.

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20"+ High Mountains (20+M)

3. Wildlife - See attached description. This site is excellent habitat for moose.

4. Watershed (Hydrologic Interpretations)-This range site has a potential for high runoff. The soil cover complex numbers are:

Excellent	85
Good - high fair	90
Fair	90

(See Section 4, SCS National Engineering Handbook for runoff quantities and hydrologic curves.)

5. Recreation and Natural Beauty- This site has some forbs which have flowers in bloom throughout spring and summer, those most showy being elephanthead, iris, shooting star, aster, and fleabane. It is a good to excellent area for elk, deer, and moose hunting, as well as small upland game animals. Those areas with high precipitation have a good potential for skiing and snowmobiling.

6. Threatened or endangered plants and animals - See wildlife description.

7. Location of Typical Examples of This Site (To be determined at the local field offices.)

8. Other Pertinent Information

GUIDE TO SUGGESTED INITIAL STOCKING RATE

Condition Class Percent Climax Vegetation AUM's/Acre Acres/AUM

Excellent	76 - 100	2.30	.43
Good	50 - 75	1.80	.56
Fair	26 - 50	1.20	.83
Poor	0 - 25	.80	1.2

RELATIVE FORAGE QUALITY OF PLANTS FOR ANIMAL USE-(See Attached Sheet)

9. Field Offices - Afton, Baggs, Buffalo, Casper, Cody, Cokeville, Douglas, Dubois, Greybull, Jackson, Kaycee, Lander, Laramie, Lovell, Pinedale, Powell, Riverton, Saratoga, Sheridan, Thermopolis, Worland

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Major Land Resource Area (43,46,48A,49)  
\_20"+ High Mountains (20+M )  
OVERFLOW Ov  
Correlated Range Site No.043XY130WY

RANGE SITE DESCRIPTION

A. PHYSICAL CHARACTERISTICS

1. Physiographic Features -This site occurs on gently sloping to moderately sloping flood plains, canyons and small valley bottoms along intermittent streams. Slopes are generally 1-10%. This site is found on all exposures. Elevation ranges from 8,200 to over 12,000 feet.

2. Climatic Features - See attached climatic description.

3. Native (climax) Vegetation

a. The climax plant community is characterized by plants which can take advantage of periodic flooding and are able to stand short periods of submersion. The vegetation of this site is 65% grasses and grass-like plants, 20% forbs and 15,% woody plants.

b. Plant species and percentages found in the climax plant community by air-dry weight are:

SPECIES	PERCENT
Grasses and Grass-like Plants	
Columbia needlegrass	5-15
Tufted hairgrass	5-15
Mountain brome	5-15
Blue wildrye	5-10
Slender wheatgrass	5-10
Idaho fescue	5-10
All following Grasses and Grass-like Plants	10-20*
Nodding brome	Oniongrass
Prairie junegrass	Spike fescue
Sun sedge	Sweetgrass
Thickspike wheatgrass	Timber danthonia
Western needlegrass	Alpine timothy
Big bluegrass	Canby bluegrass
Dunehead sedge	Letterman needlegrass
Forbs	
All following Forbs	10-20*
Agoseris	American licorice
Asters	Buttercup
Columbine	Eriogonums
Gromwell	Groundsel
Larkspur	Lupine
Milkvetch	Oregon grape
	American vetch
	Clovers
	Fleabane
	Herbaceous sage
	Meadowrue
	Paintbrush

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20"+ High Mountains (20+M)

Peavine	Penstemons	Phacelia
Phlox	Pointvetch	Pussytoes
Sandwort	Starwort	Stonecrop
Stoneseed	Violets	Western yarrow
Wild Lily-of-the-Valley		

#### Woody Plants

All following Woody Plants		5-15*
Big sagebrush	Chokecherry	
Rose	Serviceberry	
Silver buffaloberry	Silver sagebrush	
Snowberry	Willows	

\*Of plants in these groups, no more than 5% of any species is allowable in the potential plant community.

c. Density of herbage cover by ocular estimate may vary from 65 to 80 percent.

d. Species that are not a part of the climax plant community, but are most likely to invade this site if condition declines are gumweed, mullien, povertyweed, elk thistle, rubber rabbitbrush, burdock, houndstongue, and stickseed. Plants such as big sagebrush, low rabbitbrush, and thickspike wheatgrass become more dominant as conditions deteriorate.

#### 4. Total Annual Production in Excellent Condition (Pounds per Acre Air-dry Weight)

Favorable years	- 4,000
Medium years	- 3,500
Unfavorable years	- 2,500

#### 5. Soils:

a. The soils of this site are various textures, from sandy loam through tight silty clay loams. These soils occur in playa areas or along streams which receive periodic overflow from adjacent slopes. Erosion is slight. Infiltration and water movement is good. Root penetration is deep. Water holding capacity ranges widely (3 to 12 inches of available water in a 6 foot profile).

b. Soil taxonomic units which characterize this site are:

c. Complete soils descriptions are available in the soil survey descriptive legend.

#### B. MAJOR USES AND INTERPRETATIONS FOR:

1. Grazing - This site has a mixture of grasses, forbs and woody plants. Its proximity to intermittent streams and lush vegetation makes it a valuable source of feed for all forms of domestic livestock for summer and fall grazing.

Technical Guide, Section IIB  
Major Land Resource Area (43,46,48A,49)  
20"+ High Mountains (20+M)

2. Wood Products - None.

3. Wildlife - See attached description.

4. Watershed (Hydrologic Interpretations)-This range site has a potential for moderate runoff. The soil cover complex numbers are:

Excellent	60
Good - high fair	70
Fair	80

(See Section 4, SCS National Engineering Handbook for runoff quantities and hydrologic curves.)

5. Recreation and Natural Beauty - This site has a fairly large number of forbs which have flowers in bloom throughout the summer. It is a good to excellent area for elk and deer hunting as well as moose. It is a fair to good area for small upland game animals. It has good to excellent potential for skiing and snowmobiling.

6. Threatened or endangered plants and animals - See wildlife description.

7. Location of Typical Examples of This Site (To be determined at the local field offices.)

8. Other Pertinent Information

GUIDE TO SUGGESTED INITIAL STOCKING RATE

Condition Class Percent Climax Vegetation AUM's/Acre Acres/AUM

Excellent	76 - 100	1.00	1.0
Good	50 - 75	0.8	1.2
Fair	26 - 50	0.45	2.2
Poor	0 - 25	0.25	4.0

RELATIVE FORAGE QUALITY OF PLANTS FOR ANIMAL USE-(See Attached Sheet)

9. Field Offices - Afton, Baggs, Buffalo, Casper, Cody, Cokeville, Douglas, Dubois, Greybull, Jackson, Kaycee, Lander, Laramie, Lovell, Pinedale, Powell, Riverton, Saratoga, Sheridan, Thermopolis, Worland



## RANGE SITE DESCRIPTION

### A. PHYSICAL CHARACTERISTICS

1. Physiographic Features - This site occurs on gentle to gently sloping to very steep mountain slopes. It is found on all exposures at high elevations, but is found primarily on north and east slopes at the lower elevations. Slopes vary from 2-30%, but average from 20-30%. The elevation ranges from 8,200 feet to over 12,000 feet.

2. Climatic Features - See attached climatic description.

### 3. Native (climax) Vegetation

a. The climax plant community is characterized by a variety of plants which prefer a medium textured soil with moderate permeability. The vegetation of this site is dominantly 70% grasses and grass-like plants, 20,% forbs and 10% woody plants.

b. Plant species and percentages found in the climax plant community by air-dry weight are:

SPECIES	PERCENT	
Grasses and Grass-like Plants		
Idaho fescue	15-25	
Columbia needlegrass	15-25	
Thickspike wheatgrass	10-20	
Bluebunch wheatgrass	10-15	
All following Grasses and Grass-like Plants	10-20*	
Tufted hairgrass	Williams needlegrass	
One-spike danthonia	Prairie junegrass	
Pumpelly bromegrass	Richardson needlegrass	
Slender wheatgrass	Bentgrasses	
California danthonia	Cusick bluegrass	
Dunehead sedge	Letterman needlegrass	
Mutton bluegrass	Mountain bromegrass	
Nodding bromegrass	Oniongrass	
Spike trisetum	Sweetgrass	
Sun sedge	Timber danthonia	
Western needlegrass		
Forbs		
All following Forbs	10-20*	
Agoseris	American licorice	American vetch
Asters	Balsamroot	Biscuitroot

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Major Land Resource Area (43,46,48A,49)  
20"+ High Mountains (20+M)

Bluebells	Buttercup	Clovers
Coneflower	Deathcamas	Eriogonum
Flax	Geranium	Green gentian
Gromwell	Groundsel	Hawksbeard
Horsemint	Larkspur	Lousewort
Lupine	Meadowrue	Milkvetch
Mulesear	Onion	Oregon grape
Paintbrush	Peavine	Penstemon
Phacelia	Phlox	Pointvetch
Pussytoes	Sunflower	Stoneseed
Violets	Western yarrow	Yellow sneezeweed

Woody Plants

Big sagebrush	5-10
All following Woody Plants	5-10*
Serviceberry	Silver sagebrush
Snowberry	Three-tip sagebrush

\*Of plants in these groups, no more than 5% of any species is allowable in the potential plant community.

c. Density of herbage cover by ocular estimate may vary from 70 to 75 percent.

d. Species that are not a part of the climax plant community, but are most likely to invade this site if condition declines are cheatgrass, dandelion, houndstongue, and annual weeds. Western yarrow, big sagebrush and buckwheat become more dominant as conditions deteriorate.

4. Total Annual Production in Excellent Condition (Pounds per Acre Air-dry Weight)

Favorable years	- 3,000
Medium years	- 2,500
Unfavorable years	- 1 , 800

5. Soils:

a. The soils of this site are deep and well drained. They are dark brown to dark grayish brown. Reaction ranges from slightly acid to mildly alkaline. Some soils have a lime horizon below 3 feet. The overlying soil is usually non-calcareous. Textures range from very fine sandy loams through clay loams. Permeability is moderate. These soils have a high water holding capacity ranging from 10-14 inches in a 6 foot profile.

b. Soil taxonomic units which characterize this site are:

c. Complete soils descriptions are available in the soil survey descriptive legend.

B. MAJOR USES AND INTERPRETATIONS FOR:

20"+ High Mountains (20+M)

1. Grazing - This site is predominantly grasses with a small amount of forbs and woody plants. It is valuable for summer and fall use by all forms of domestic livestock.

2. Wood Products - None.

3. Wildlife - See attached description.

4. Watershed (Hydrologic Interpretations)-This range site has a potential for low runoff. The soil cover complex numbers are:

Excellent	55
Good - high fair	65
Fair	80

(See Section 4, SCS National Engineering Handbook for runoff quantities and hydrologic curves.)

5. Recreation and Natural Beauty - This site has a fairly large number of forbs which have flowers in bloom throughout the spring, summer and fall. It is a good to excellent area for elk, deer, moose, and bighorn sheep hunting, as well as small upland game birds. It has a high potential for skiing and snowmobiling.

6. Threatened or endangered plants and animals - See wildlife description.

7. Location of Typical Examples of This Site (To be determined at the local field offices.)

8. Other Pertinent Information

GUIDE TO SUGGESTED INITIAL STOCKING RATE

Condition Class Percent Climax Vegetation AUM's/Acre Acres/AUM

Excellent	76 - 100	0.8	1.2
Good	50 - 75	0.65	1.5
Fair	26 - 50	0.35	2.8
Poor	0 - 25	0.2	5.0

RELATIVE FORAGE QUALITY OF PLANTS FOR ANIMAL USE-(See Attached Sheet)

9. Field Offices - Afton, Baggs, Buffalo, Casper, Cody, Cokeville, Douglas, Dubois, Greybull, Jackson, Kaycee, Lander, Laramie, Lovell, Pinedale, Powell, Riverton, Saratoga, Sheridan, Thermopolis, Worland

Technical Guide, Section IIB  
Major Land Resource Area (43,46,48A,49)  
20"+ High Mountains (20+M)  
COARSE UPLAND CU  
Correlated Range Site No.043XY108WY

RANGE SITE DESCRIPTION

A. PHYSICAL CHARACTERISTICS

1. Physiographic Features -This site occurs on all exposures, on rolling to very rough topography with slopes of 5-65%. The elevation ranges from 8,200 to over 12,000 feet.
2. Climatic Features - See attached climatic description.

3. Native (climax) Vegetation

a. The climax plant community is characterized by plants which do well in very cobbly to somewhat droughty soil. Vegetation of this site is a browse aspect which consists of 60% grasses and grass-like plants, 15% forbs and 25% woody plants.

b. Plant species and percentages found in the climax plant community by air-dry weight are:

SPECIES	PERCENT	
Grasses and Grass-like Plants		
Bluebunch wheatgrass	25-35	
Idaho fescue	10-15	
Spike fescue	10-15	
Big bluegrass	5-10	
All following grasses and Grass-like Plants	10-20*	
California danthonia	Canby bluegrass	Columbia needlegrass
Letterman needlegrass	Mountain brome	Mountain muhly
Nodding brome	One-spike danthonia	Oniongrass
Prairie junegrass	Redtop bentgrass	Sun sedge
Slender wheatgrass	Spike trisetum	Thickspike wheatgrass
Timber danthonia	Western needlegrass	Alpine timothy
Basin wildrye	Bentgrasses	
Forbs		
Ail following Forbs		5-15*
Agoseris	American bistort	American vetch
Aster	Balsamroot	Biscuitroot
Bluebells	Buttercup	Clovers
Eriogonum	Fleabane	Geum
Goldenrod	Groundsel	Hawksbeard
Herbaceous sage	Horsemint	Lousewort
Lupine	Milkvetch	Minerscandle
Mulesear	Mustard	Oregon grape
Paintbrush	Peavine	Penstemon
Phacelia	Phlox	Pointvetch

Technical Guide, Section IIB  
Major Land Resource Area (43,46,48A,49)  
20"+ High Mountains (20+M)

Primrose	Pussytoes	Sandwort
Stonecrop	Sunflower	Toadflax
Western yarrow		
Woody Plants		
Bitterbrush		10-20
Big sagebrush		5-10
All following Woody Plants	T-10*	
Black sagebrush	Rubber rabbitbrush	
Serviceberry	Snowberry	

\*Of plants in these groups, no more than 5% of any species is allowable in the potential plant community.

c. Density of herbage cover by ocular estimate may vary from 45 to 55 percent.

d. Species that are not a part of the climax plant community, but are most likely to invade this site if condition declines are low rabbitbrush, houndstongue, rumex, mullien, bull thistle and some annual weeds. Rubber rabbitbrush, western yarrow, big sagebrush, and buckwheat become more dominant as conditions deteriorate.

4. Total Annual Production in Excellent Condition (Pounds per Acre Air-dry Weight)

Favorable years	- 2,400
Medium years	- 2,000
Unfavorable years	- 1,200

5. Soils:

a. The soils of this site are deep, well-drained and generally noncalcareous. Surface soils are usually loams or sandy loams. Soils contain at least 35% by volume coarse fragments in the first 20 inches. The volume of coarse fragments generally increases with depth. These cobbly, stony and/or bouldery soils occur as terraces, fan terraces, or glacial moraines. Permeability is moderate to rapid. These soils have a water holding capacity of 5 to 8 inches of available water in a 6 foot profile. Parent materials are derived from sandstone, limestone, siltstone, and granite.

b. Soil taxonomic units which characterize this site are:

c. Complete soils descriptions are available in the soil survey descriptive legend.

B. MAJOR USES AND INTERPRETATIONS FOR:

1. Grazing - This site has a browse aspect with a good understory of grasses and forbs. It has some value for summer and fall use by all classes of livestock depending on the degree

of boulder and cobbles on the surface which inhibit livestock movement. Sheep are more adaptable to this site than other domestic grazing animals.

2. Wood Products - None.

3. Wildlife - See attached description. The potential is good to excellent for rangeland habitat. Lower elevations of this site make a good to excellent winter range because of the mixed shrub grass community.

4. Watershed (Hydrologic Interpretations)-This range site has a potential for moderate runoff. The soil cover complex numbers are:

Excellent	60
Good - high fair	70
Fair	80

(See Section 4, SCS National Engineering Handbook for runoff quantities and hydrologic curves.)

5. Recreation and Natural Beauty-This site has a large number of forbs which have flowers in bloom through spring and summer. It is a good to excellent area for deer, elk, and bear hunting as well as upland game birds. It has a high potential for skiing and snowmobiling.

6. Threatened or endangered plants and animals - See wildlife description.

7. Location of Typical Examples of This Site (To be determined at the local field offices.)

8. Other Pertinent Information

#### GUIDE TO SUGGESTED INITIAL STOCKING RATE

Condition Class	Percent Climax Vegetation	AUM's/Acre	Acres/AUM
Excellent	76 - 100	0.7	1.4
	G o o		0
Fair	26 - 50	0.3	3.3
Poor	0 - 25	0.17	5.9

RELATIVE FORAGE QUALITY OF PLANTS FOR ANIMAL USE-(See Attached Sheet)

9. Field Offices - Afton, Baggs, Buffalo, Casper, Cody, Cokeville, Douglas, Dubois, Greybull, Jackson, Kaycee, Lander, Laramie, Lovell, Pinedale, Powell, Riverton, Saratoga, Sheridan, Thermopolis, Worland

## RANGE SITE DESCRIPTION

### A. PHYSICAL CHARACTERISTICS

1. Physiographic Features -This site can be found in a lowland or upland position, on flat to moderately sloping land. It is found on all exposures at high elevations, but is found primarily on north and east slopes in lower elevations. Slopes are nearly level to 60%, but mostly 5-40%. The elevations range from 8,200 to over 12,000 feet.

2. Climatic Features - See attached climatic description.

### 3. Native (climax) Vegetation

a. The climax plant community is characterized by plants which can survive in extremely heavy soils which develop large cracks when dry. The vegetation is a mixture of 75% grasses and grass-like plants, 15% forbs and 10% woody plants.

b. Plant species and percentages found in the climax plant community by air-dry weight are:

SPECIES	PERCENT
Grasses and Grass-like Plants	
Thickspike wheatgrass	20-30
Idaho fescue	10-20
Spike fescue	10-20
All following Grasses and Grass-like Plants	10-20*
Big bluegrass	Canby bluegrass
Columbia needlegrass	Cusick bluegrass
Letterman needlegrass	Mountain brome grass
Mutton bluegrass	Nodding brome grass
Oniongrass	Prairie junegrass
Pumpelly brome grass	Richardson needlegrass
Sandberg bluegrass	Slender wheatgrass
Sun sedge	Sweetgrass
Tufted hairgrass	Blue wildrye
Bottlebrush squirreltail	
Forbs	
All following Forbs	5-15*
American vetch	Aster
Biscuitroot	Bluebells
Eriogonums	Fleabane
Groundsel	Hawksbeard
Herbaceous sage	Little sunflower

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Major Land Resource Area (43,46,48A,49)  
20"+ High Mountains (20+M)

Locoweed	Milkvetch	
Mulesear	Phlox	
Pointvetch	Pussytoes	
Western coneflower	Western yarrow	
Yellow sneezeweed		
Woody Plants		
All Following Woody Plants		5-10*
Low rabbitbrush	Low sagebrush	

\*Of plants in these groups, no more than 5% of any species is allowable in the potential plant community.

c. Density of herbage cover by ocular estimate may vary from 65 to 70 percent.

d. Species that are not a part of the climax plant community, but are most likely to invade this site if condition declines are cheatgrass, annual forbs, Canadian thistle, dandelion, mullien, tarweed, and snakeweed. Low sagebrush and mulesear become more dominant as conditions deteriorate.

4. Total Annual Production in Excellent Condition (Pounds per Acre Air-dry Weight)

Favorable years	- 1,800
Medium years	- 1,500
Unfavorable years	- 1,200

5. Soils:

a. The soils of this site are at least 20 inches deep. The texture is a heavy clay with large cracks when dry and very sticky when wet. Permeability is very slow.

b. Soil taxonomic units which characterize this site are:

c. Complete soils descriptions are available in the soil survey descriptive legend.

B. MAJOR USES AND INTERPRETATIONS FOR:

1. Grazing - This site is predominantly grasses and is valuable for summer and fall use by all forms of domestic livestock.

2. Wood Products - None.

3. Wildlife - See attached description.



4. Watershed (Hydrologic Interpretations)-This range site has a potential for high runoff. The soil cover complex numbers are:

Excellent	80
Good - high fair	85
Fair	90

(See Section 4, SCS National Engineering Handbook for runoff quantities and hydrologic curves.)

5. Recreation and Natural Beauty -This area is good to excellent for big game hunting, including elk, moose, bighorn sheep and bear. Upland game birds inhabit the area, but hunting would be only fair. It has a good to excellent potential for skiing and snowmobiling.

6. Threatened or endangered plants and animals - See wildlife description.

7. Location of Typical Examples of This Site (To be determined at the local field offices.)

8. Other Pertinent Information

#### GUIDE TO SUGGESTED INITIAL STOCKING RATE

Condition Class Percent Climax Vegetation AUM's/Acre Acres/AUM

Excellent	76 - 100	0.7	1.4
Good	50 - 75	0.55	1.8
Fair	26 - 50	0.3	3.3
Poor	0 - 25	0.17	5.9

RELATIVE FORAGE QUALITY OF PLANTS FOR ANIMAL USE-(See Attached Sheet)

9. Field Offices - Afton, Baggs, Buffalo, Casper, Cody, Cokeville, Douglas, Dubois, Greybull, Jackson, Kaycee, Lander, Laramie, Lovell, Pinedale, Powell, Riverton, Saratoga, Sheridan, Thermopolis, Worland

Technical Guide, Section IIB  
Major Land Resource Area (43,46,48A,49)  
20"+ High Mountains (20+M)  
STEEP STONY SSt  
Correlated Range Site No.043XY170WY

RANGE SITE DESCRIPTION

A. PHYSICAL CHARACTERISTICS

1. Physiographic Features-This site occurs on steep mountain slopes and fans. It is found on all exposures, but is predominantly on south and west facing slopes. Slopes vary from 15-70%, but are mostly 25-50%. Elevation ranges from 8,200 to over 12,000 feet.

2. Climatic Features - See attached climatic description.

3. Native (climax) Vegetation

a. The climax plant community is characterized by a variety of plants which can grow on a very cobbly, unstable, somewhat droughty soil. The vegetation is a mixture of 55% grasses and grass-like plants, 10% forbs and 35% woody plants.

b. Plant species and percentages found in the climax plant community by air-dry weight are:

SPECIES		PERCENT
Grasses and Grass-like Plants		
Bluebunch wheatgrass		25-35
Big bluegrass		5-10
Spike fescue		5-10
Thickspike wheatgrass		5-10
Idaho fescue		5-10
All following Grasses and Grass-like Plants		10-20*
Indian ricegrass	Letterman needlegrass	Mountain brome
Mountain muhly	Mutton bluegrass	One-spike danthonia
Oniongrass	Prairie junegrass	Richardson needlegrass
Slender wheatgrass	Spike trisetum	Bentgrasses
Blue wildrye	California danthonia	Canby bluegrass
Timber danthonia	Columbia needlegrass	Western needlegrass
Bottlebrush squirreltail		
Forbs		
All following Forbs		5-10*
Agoseris	American vetch	Aster
Balsamroot	Biscuitroot	Bluebells
Buckwheat	Buttercup	Clovers
Columbine	Eriogonums	False solomonseal
Fleabane	Fireweed	Geranium
Geum	Groundsel	Harebell

Technical Guide, Section IIB  
Major Land Resource Area (43,46,48A,49)  
20"+ High Mountains (20+M)

Hawksbeard	Herbaceous sage	Little sunflower
Lupine	Meadowrue	Milkvetch
Mulesear	Mustard	Oregon grape
Paintbrush	Penstemons	Phlox
Pointvetch	Pussytoes	Sandwort
Silky phacelia	Stonecrop	Stoneseed
Valeriana	Violets	Western yarrow

Woody Plants

True mountainmahogany		5-15
Serviceberry		T-5
Bitterbrush		T-5
All following Woody Plants		5-15*
Honeysuckle	Low rabbitbrush	Low sagebrush
Big sagebrush	Mountain ash	Prostrate juniper
Snowberry	Three-tip sagebrush	

\*Of plants in these groups, no more than 5% of any species is allowable in the potential plant community.

c. Density of herbage cover by ocular estimate may vary from 40 to 45 percent.

d. Species that are not a part of the climax plant community, but are most likely to invade this site if condition declines are cheatgrass, annual weeds, knotweed, and rubber rabbitbrush. Big sagebrush, low sagebrush, low rabbitbrush, three-tip sagebrush, and increasing forbs become more dominant as conditions deteriorate.

4. Total Annual Production in Excellent Condition (Pounds per Acre Air-dry Weight)

Favorable years	- 2,200
Medium years	- 1,800
Unfavorable years	- 1 , 400

5. Soils:

a. The soils of this site are dark colored, stony and/or bouldery. They occur as steep mountain foot slopes with a gradient usually greater than 30%. The first 20 inches of soil contain at least 35% by volume coarse fragments. The volume of coarse fragments usually increases with depth. Soils in this site are deep and well-drained. Roots penetrate the soil material readily, but are forced to detour around coarse fragments. Water holding capacity is moderate because of the high content of coarse fragments.

b. Soil taxonomic units which characterize this site are:

c. Complete soils descriptions are available in the soil survey descriptive legend.

Technical Guide, Section IIB  
 Major Land Resource Area (43,46,48A,49)  
20"+ High Mountains (20+M) B.

MAJOR USES AND INTERPRETATIONS FOR:

1. Grazing - This site is predominantly grasses and woody plants, with a small amount of forbs. The lower slopes are valuable for summer and fall use by all forms of domestic livestock. The higher and steeper slopes are valuable for summer and fall use by sheep.
2. Wood Products - Some saw logs, pulp wood, and firewood. The sparse timber stand makes harvest uneconomical.
3. Wildlife - See attached description.
4. Watershed (Hydrologic Interpretations)-This range site has a potential for moderate runoff. The soil cover complex numbers are:
 

Excellent	60
Good - high fair	70
Fair	80

(See Section 4, SCS National Engineering Handbook for runoff quantities and hydrologic curves.)

5. Recreation and Natural Beauty- This site is good to excellent for elk, deer, moose and sheep hunting, and fair for upland game birds. It has excellent potential for skiing and snowmobiling.
6. Threatened or endangered plants and animals - See wildlife description.
7. Location of Typical Examples of This Site (To be determined at the local field offices.)
8. Other Pertinent Information

GUIDE TO SUGGESTED INITIAL STOCKING RATE

Condition Class Percent Climax Vegetation AUM's/Acre Acres/AUM

Excellent	76 - 100	0.7	1.3
Good	50 - 75	0.55	1.7
Fair	26 - 50	0.30	3.3
Poor	0 - 25	0.17	5.9

RELATIVE FORAGE QUALITY OF PLANTS FOR ANIMAL USE-(See Attached Sheet)

9. Field Offices - Afton, Baggs, Buffalo, Casper, Cody, Cokeville, Douglas, Dubois, Greybull, Jackson, Kaycee, Lander, Laramie, Lovell, Pinedale, Powell, Riverton, Saratoga, Sheridan, Thermopolis, Worland

Technical Guide, Section IIB  
Major Land Resource Area (43,46,48A,49)  
20"+ High Mountains (20+M)  
STEEP LOAMY SLy)  
Correlated Range Site No-043XY168WY

RANGE SITE DESCRIPTION

A. PHYSICAL CHARACTERISTICS

1. Physiographic Features- This site occurs in an upland position with moderately to steeply sloping land. Slopes vary from 15-70 percent, but are generally 30-50 percent. It occurs on all exposures, but generally is found on north and east facing exposures. The elevation ranges from 8,200 to over 12,000 feet.

2. Climatic Features - See attached climatic description.

3. Native (climax) Vegetation

a. The climax plant community is characterized by plants which can take advantage of cool temperatures and relatively moist conditions which occur on steep north and east facing slopes. The vegetation is a mixture of 75% grasses and grass-like plants, 15% forbs and 10% woody plants.

b. Plant species and percentages found in the climax plant community by air-dry weight are:

SPECIES	PERCENT
Grasses and Grass-like Plants	
Bluebunch wheatgrass	25-35
Idaho fescue	15-20
Columbia needlegrass	10-20
Spike fescue	10-20
Thickspike wheatgrass	10-20
All following Grasses and	Grass-like Plants Canby 1 0-20*
California danthonia	bluegrass Letterman needlegrass
Cusick bluegrass	Nodding brome grass Prairie
Mutton bluegrass	junegrass Sandberg bluegrass
Oniongrass	Alpine timothy Bentgrasses
Pumpelly brome grass	Bottlebrush squirreltail
Slender wheatgrass	Mountain brome grass Sun sedge
Bearded wheatgrass	
Blue wildrye	
Big bluegrass	
Spike trisetum	
Timber danthonia	
Forbs	
All following Forbs	5-15*
Agoseris	American licorice American vetch
Aster	Balsamroot Bedstraw
Bluebells	Buckwheat Buttercup
Clovers	Eriogonums Geranium

Technical Guide, Section IIB  
Major Land Resource Area (43,46,48A,49)  
20"+ High Mountains (20+M)

Green gentian	Groundsel	Hawksbeard
Horsemint	Little sunflower	Lupine
Meadowrue	Milkvetch	Mulesear
Oregon grape	Paintbrush	Penstemon
Phlox	Pointvetch	Pussytoes
Sandwort	Silky phacelia	Stonecrop
Stoneseed	Violets	Western yarrow

Woody Plants

All following Woody Plants

5-1 5-

Big sagebrush	Bitterbrush
Chokecherry	Low rabbitbrush
Rose	Serviceberry
Silver sagebrush	Snowbrush ceanothus
Snowberry	Three-tip sagebrush

\*Of plants in these groups, no more than 5% of any species is allowable in the potential plant community.

c. Density of herbage cover by ocular estimate may vary from 55 to 60 percent.

d. Species that are not a part of the climax plant community, but are most likely to invade this site if condition declines are cheatgrass, dandelion, houndstongue, mullien, annual weeds, and rubber rabbitbrush. Big sagebrush, low rabbitbrush and snowberry become more dominant as conditions deteriorate.

4. Total Annual Production in Excellent Condition (Pounds per Acre Air-dry Weight)

Favorable years	- 2,600
Medium years	- 2,200
Unfavorable years	- 1,800

5. Soils:

a. The soils of this site exceed 20 inches in depth and occur on slopes in excess of 30%, usually on north and east facing slopes. Some soils have a lime horizon below 36 inches. The overlying soils are usually noncalcareous. Infiltration and internal water movement are good. Roots penetrate the soil material readily. These soils have a high water holding capacity ranging from about 10-14 inches in a 6 foot profile. Coarse fragments are variable throughout the profile, but less than 35 percent by volume.

b. Soil taxonomic units which characterize this site are:

c. Complete soils descriptions are available in the soil survey descriptive legend.

B. MAJOR USES AND INTERPRETATIONS FOR:

Technical Guide, Section IIB

Major Land Resource Area (43,46,48A,49)

20"+ High Mountains (20+M)

1. Grazing - This site is predominantly grasses with a small amount of forbs and woody plants. It is valuable for summer and fall use by all forms of domestic livestock. Steeper slopes are better utilized by sheep, and lesser slopes are better utilized by cattle.

2. Wood Products - None.

3. Wildlife - See attached description.

4. Watershed (Hydrologic Interpretations)-This range site has a potential for moderate runoff. The soil cover complex numbers are:

Excellent	65
Good - high fair	75
Fair	80

(See Section 4, SCS National Engineering Handbook for runoff quantities and hydrologic curves.)

5. Recreation and Natural Beauty -This site has a small amount of forbs which have flowers in bloom through spring and summer. It is a good to excellent area for elk, moose, and deer hunting, as well as small upland game birds. It has a high potential for skiing and moderate potential for snowmobiling.

6. Threatened or endangered plants and animals - See wildlife description.

7. Location of Typical Examples of This Site (To be determined at the local field offices.)

8. Other Pertinent Information

GUIDE TO SUGGESTED INITIAL STOCKING RATE

Condition Class Percent Climax Vegetation AUM's/Acre Acres/AUM

Excellent	76 - 100	0.7	1.4
Good	50 - 75	0.55	1.8
Fair	26 - 50	0.3	3.3
Poor	0 - 25	0.17	5.9

RELATIVE FORAGE QUALITY OF PLANTS FOR ANIMAL USE-(See Attached Sheet)

9. Field Offices - Afton, Baggs, Buffalo, Casper, Cody, Cokeville, Douglas, Dubois, Greybull, Jackson, Kaycee, Lander, Laramie, Lovell, Pinedale, Powell, Riverton, Saratoga, Sheridan, Thermopolis, Worland

Technical Guide, Section IIB  
Major Land Resource Area (43,46,48A,49)  
20"+ High Mountains (20+M)

SHALLOW LOAMY SwLy  
Correlated Range Site No-043XY162WY

RANGE SITE DESCRIPTION

A. PHYSICAL CHARACTERISTICS

1. Physiographic Features -This site occurs on rolling to steep slopes and ridges. It is found on all exposures, but is more common on south and west facing slopes. Slopes vary from 5-60%, but average 5-35%. The elevation ranges from 8,200 to over 12,000 feet.

2. Climatic Features - See attached climatic description.

3. Native (climax) Vegetation

a. The climax plant community is dominated by plants which can grow with restricted root depth and relatively droughty conditions. Potential vegetation is about 65% grasses and grass like plants, 10% forbs, and 25% woody plants.

b. Plant species and percentages found in the climax plant community by air-dry weight are:

SPECIES	PERCENT
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Grasses and Grass-like Plants

Bluebunch wheatgrass	25-35
Idaho fescue	15-25
Spike trisetum	10-20
Spike fescue	10-20
Slender wheatgrass	5-10
All Following Grasses and Grass-like Plants	10-20*
Thickspike wheatgrass	Canby bluegrass
Columbia needlegrass	Cusick bluegrass
Letterman needlegrass	Mountain brome grass
Mountain muhly	Mutton bluegrass
Oniongrass	Prairie junegrass
Pumpelly brome grass	Timber danthonia
Western needlegrass	Alpine timothy
Bentgrasses	Big bluegrass
Bottlebrush squirreltail	California danthonia

Forbs

All following Forbs	5-10*
Agoseris Aster	American vetch
Biscuitroot Clovers	Balsamroot
Flax	Bluebells
	Eriogonums
	Fleabane



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Major Land Resource Area (43,46,48A,49)  
20"+ High Mountains (20+M)

Geranium	Groundsel
Larkspur	Lupine
Milkvetch	Oregon grape
Paintbrush	Phlox
Pointvetch	Pussytoes
Stonecrop	Stoneseed
Sunflower	Western yarrow

Woody Plants

Bitterbrush	5-1 0
All following Woody Plants	5-15*
Big sagebrush	Chokecherry
Serviceberry	Silver sagebrush
Snowberry	Snowbrush ceanothus

\*Of plants in these groups, no more than 5% of any species is allowable in the potential plant community.

c. Density of herbage cover by ocular estimate may vary from 30 to 65 percent.

d. Species that are not a part of the climax plant community, but are most likely to invade this site if condition declines are annual grasses, annual forbs, Kentucky bluegrass, and perennial weeds. Big sagebrush, balsamroot, and snowberry become more dominant as conditions deteriorate.

4. Total Annual Production in Excellent Condition (Pounds per Acre Air-dry Weight)

Favorable years	- 2,000
Medium years	- 1,700
Unfavorable years	- 1,300

5. Soils:

a. The soils of this site are 10-20 inches deep over all kinds of bedrock except igneous or volcanic. Textures range from very fine sandy loams to clay loams. Bedrock is commonly limestone, siltstone, or shales. This site may also include some deep gravel and/or cobbly soils on south and west facing slopes which react like shallow soils.

b. Soil taxonomic units which characterize this site are:

c. Complete soils descriptions are available in the soil survey descriptive legend.

B. MAJOR USES AND INTERPRETATIONS FOR:

1. Grazing - This site is predominantly grasses and forbs with a small amount of woody plants. It is valuable for summer and fall use by all forms of domestic livestock.

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20"+ High Mountains (20+M)

2. Wood Products - None.
3. Wildlife - See attached description.
4. Watershed (Hydrologic Interpretations)-This range site has a potential for high runoff. The soil cover complex numbers are:

Excellent	70
Good - high fair	75
Fair	80

(See Section 4, SCS National Engineering Handbook for runoff quantities and hydrologic curves.)

5. Recreation and Natural Beauty -This site has a fairly large number of forbs which have flowers in bloom throughout the spring and summer. It is a good to excellent area for elk and deer hunting, as well as a fair to good area for small upland game animals. It has a high potential for skiing and snowmobiling.

6. Threatened or endangered plants and animals - See wildlife description.

7. Location of Typical Examples of This Site (To be determined at the local field offices.)

8. Other Pertinent Information

GUIDE TO SUGGESTED INITIAL STOCKING RATE

Condition Class	Percent Climax Vegetation	AUM's/Acre	Acres/AUM
Excellent	76 - 100	0.6	1.7
Good	50 - 75	0.5	2.0
Fair	26 - 50	0.25	4.0
Poor	0 - 25	0.15	6.7

RELATIVE FORAGE QUALITY OF PLANTS FOR ANIMAL USE-(See Attached Sheet)

9. Field Offices - Afton, Baggs, Buffalo, Casper, Cody, Cokeville, Douglas, Dubois, Greybull, Jackson, Kaycee, Lander, Laramie, Lovell, Pinedale, Powell, Riverton, Saratoga, Sheridan, Thermopolis, Worland

# RANGE SITE DESCRIPTION

## A. PHYSICAL CHARACTERISTICS

1. Physiographic Features -This site is found on rolling to steep mountain slopes and ridges. It is found on all exposures, but most commonly on south and west facing slopes and ridges. Slopes vary from gentle to steep, from 5-70%, but mostly 15-30%. Elevation ranges from 8,200 to over 12,000 feet.

2. Climatic Features - See attached climatic description.

3. Native (climax) Vegetation

a. The climax plant community is dominated by plants which can grow with restricted root depth, droughty conditions and neutral to acid soils. Potential vegetation is about 65% grasses and grass-like plants, 10% forbs, and 25% woody plants.

b. Plant species and percentages found in the climax plant community by air-dry weight are:

SPECIES	PERCENT
Grasses and Grass-like Plants	
Bluebunch wheatgrass	35-45
Spike fescue	15-25
Thickspike wheatgrass	5-15
All following Grasses and Grass-like Plants	10-20*
Columbia needlegrass	Idaho fescue
Letterman needlegrass	Mountain brome
Mutton bluegrass	Mountain muhly
One-spike danthonia	Oniongrass
Prairie junegrass	Spike trisetum
Timber danthonia	Western needlegrass
Bottlebrush squirreltail	California danthonia
Canby bluegrass	Bentgrasses
Big bluegrass	
Forbs	
All following Forbs	5-10*
Agoseris	American vetch
Aster	Balsamroot
Bluebells	Clovers
Eriogonums	Fleabane
Groundsel	Milkvetch
Oregon grape	Paintbrush
Phlox	Pointvetch

Technical Guide, Section IIB  
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20"+ High Mountains (20+M)

Pussytoes	Stonecrop	
Stoneseed	Violets	
Western yarrow		
Woody Plants		
Bitterbrush		10-1 5
Black sagebrush		5-10
All following woody plants		5-15*
Snowberry	Snowbrush ceanothus	
Three-tip sagebrush	Big sagebrush	

\*Of plants in these groups, no more than 5% of any species is allowable in the potential plant community.

c. Density of herbage cover by ocular estimate may vary from 15 to 25 percent.

d. Species that are not a part of the climax plant community, but are most likely to invade this site if condition declines are annual grasses, annual forbs, and perennial weeds, such as burdock, stickseed, and thistle. Big sagebrush, and balsamroot become more dominant as conditions deteriorate.

4. Total Annual Production in Excellent Condition (Pounds per Acre Air-dry Weight)

Favorable years	- 1,800
Medium years	- 1,500
Unfavorable years	- 1,200

5. Soils:

a. The soils of this site are medium to moderately coarse textured ranging in depth from 10-20 inches over igneous or volcanic bedrock. This site may also include some deep gravelly and/or cobbly soil on south and west facing slopes, which react like shallow soils. Permeability is moderate to rapid.

b. Soil taxonomic units which characterize this site are:

c. Complete soils descriptions are available in the soil survey descriptive legend.

B. MAJOR USES AND INTERPRETATIONS FOR:

1. Grazing - This site is predominantly grasses and shrubs with a small amount of forbs. It is valuable for summer and fall use by all forms of domestic livestock.

2. Wood Products - None.

3. Wildlife - See attached description.

4. Watershed (Hydrologic Interpretations)-This range site has a potential for high runoff. The soil cover complex numbers are:

Excellent	70
Good - high fair	75
Fair	80

(See Section 4, SCS National Engineering Handbook for runoff quantities and hydrologic curves.)

5. Recreation and Natural Beauty -This site has a small number of forbs which have flowers in bloom throughout spring and summer. It is a fair to good area for elk and deer hunting, as well as small upland game animals. It has good potential for skiing and snowmobiling.

6. Threatened or endangered plants and animals - See wildlife description.

7. Location of Typical Examples of This Site (To be determined at the local field offices.)

8. Other Pertinent Information

#### GUIDE TO SUGGESTED INITIAL STOCKING RATE

Condition Class	Percent Climax Vegetation	AUM's/Acre	Acres/AUM
Excellent	76 - 100	0.55	1.8
Good	50 - 75	0.45	2.2
Fair	26 - 50	0.22	4.5
Poor	0 - 25	0.13	7.7

RELATIVE FORAGE QUALITY OF PLANTS FOR ANIMAL USE-(See Attached Sheet)

9. Field Offices - Afton, Baggs, Buffalo, Casper, Cody, Cokeville, Douglas, Dubois, Greybull, Jackson, Kaycee, Lander, Laramie, Lovell, Pinedale, Powell, Riverton, Saratoga, Sheridan, Thermopolis, Worland

Technical Guide, Section IIB  
Major Land Resource Area (43,46,48A,49)  
20"+ High Mountains (20+M)  
STONY St  
Correlated Range Site No.043XY172WY

RANGE SITE DESCRIPTION

A. PHYSICAL CHARACTERISTICS

1. Physiographic Features -This site occurs on gentle to steep mountain slopes, valley bottoms, and outwash fans. It is found on all exposures. The elevation ranges from 8,200 to over 12,000 feet.

2. Climatic Features - See attached climatic description.

3. Native (climax) Vegetation

a. The climax plant community is dominated by plants which can do well in very cobbly and droughty soils. Potential vegetation is about 55% grasses and grass-like plants, 10% forbs, and 350 woody plants.

b. Plant species and percentages found in the climax plant community by air-dry weight are:

SPECIES	PERCENT
Grasses and Grass-like Plants	
Bluebunch wheatgrass	25-35
Spike fescue	15-25
Idaho fescue	5-10
All following Grasses and Grass-like Plants	10-20*
Letterman needlegrass	Mountain muhly
Mutton bluegrass	One-spike danthonia
Oniongrass	Prairie junegrass
Slender wheatgrass	Thickspike wheatgrass
Timber danthonia	Western needlegrass
Bottlebrush squirreltail	Canby bluegrass
Columbia needlegrass	Bentgrasses
Big bluegrass	Spike trisetum
Forbs	
All following Forbs	5-10*
Agoseris	American vetch
Asters	Balsamroot
Biscuitroot	Bluebells
Buckwheat	Clovers
Eriogonum	Fleabane
Groundsel	Hawksbeard
Lupine	Milkvetch
Oregon grape	Owlclover
Paintbrush	Phlox

Technical Guide, Section IIB  
Major Land Resource Area (43,46,48A,49)  
20"+ High Mountains (20+M)

Pointvetch	Pussytoes
Sandwort	Stonecrop
Stoneseed	Western yarrow

Woody Plants

Bitterbrush	5-10
Low sagebrush	5-10
All following Woody Plants	5-15*
Snowberry	Three-tip sagebrush
Big sagebrush	

\*Of plants in these groups, no more than 5% of any species is allowable in the potential plant community.

c. Density of herbage cover by ocular estimate may vary from 35 to 40 percent.

d. Species that are not a part of the climax plant community, but are most likely to invade this site if condition declines are cheatgrass, annual weeds, and annual forbs. Increasing shrubs and forbs, especially big sagebrush, yarrow, and Oregon grape become more dominant as conditions deteriorate.

4. Total Annual Production in Excellent Condition (Pounds per Acre Air-dry Weight)

Favorable years	- 1,200
Medium years	- 1,000
Unfavorable years -	750

5. Soils:

a. The soils of this site are deep, well drained, and very gravelly, very stony, or very cobbly throughout the major part of the soil profile. The soil contains at least 35% percent by volume coarse fragments in the first 20 inches of the profile. This does allow roots to penetrate to at least 20 inches in most places. Water holding capacity is moderate because of the high content of coarse fragments. Under proper management these soils have little surface runoff and slight or no erosion.

b. Soil taxonomic units which characterize this site are:

c. Complete soils descriptions are available in the soil survey descriptive legend.

B. MAJOR USES AND INTERPRETATIONS FOR:

1. Grazing - This site is predominantly grasses and shrubs with a small amount of forbs. Because of its upland position on steep slopes, sheep are more adaptive for grazing in summer and fall.

2. Wood Products - None.

3. Wildlife - See attached description.

4. Watershed (Hydrologic Interpretations)-This range site has a potential for moderate runoff. The soil cover complex numbers are:

Excellent	60
Good - high fair	70
Fair	80

(See Section 4, SCS National Engineering Handbook for runoff quantities and hydrologic curves.)

5. Recreation and Natural Beauty -This site has a few forbs which have flowers in bloom through spring and summer. It is a fair to good area for elk and deer hunting. It has fair potential for skiing and snowmobiling.

6. Threatened or endangered plants and animals - See wildlife description.

7. Location of Typical Examples of This Site (To be determined at the local field offices.)

8. Other Pertinent Information

#### GUIDE TO SUGGESTED INITIAL STOCKING RATE

Condition Class Percent Climax Vegetation AUM's/Acre Acres/AUM

Excellent	76 - 100	0.5	2.0
Good	50 - 75	0.4	2.5
Fair	26 - 50	0.2	5.0
Poor	0 - 25	0.12	8.3

RELATIVE FORAGE QUALITY OF PLANTS FOR ANIMAL USE-(See Attached Sheet)

9. Field Offices - Afton, Baggs, Buffalo, Casper, Cody, Cokeville, Douglas, Dubois, Greybull, Jackson, Kaycee, Lander, Laramie, Lovell, Pinedale, Powell, Riverton, Saratoga, Sheridan, Thermopolis, Worland



Technical Guide, Section IIB  
Major Land Resource Area (43,46,48A,49)  
20"+ High Mountains (20+M)  
VERY SHALLOW VS  
Correlated Range Site No-043XY176WY

RANGE SITE DESCRIPTION

A. PHYSICAL CHARACTERISTICS

1. Physiographic Features -This site occurs in an upland position with steep slopes. It may be found in all positions and on all slopes. Slopes vary from 1-70%, but most commonly from 25-50 percent. Elevation ranges from 8,200 to over 12,000 feet.

2. Climatic Features - See attached climatic description.

3. Native (climax) Vegetation

a. The climax plant community is dominated by plants which can survive with severe root depth limitation and under relatively droughty conditions. Potential vegetation is about 65% grasses and grass-like plants, 10% forbs, and 25% woody plants.

b. Plant species and percentages found in the climax plant community by air-dry weight are:

SPECIES	PERCENT
Grasses and Grass-like Plants	
Bluebunch wheatgrass	35-45
Idaho fescue	5-10
Spike fescue	5-10
Thickspike wheatgrass	5-10
All following Grasses and Grass-like Plants 10-20*	
Letterman needlegrass	Mountain brome
Mutton bluegrass	Oniongrass
Prairie junegrass	Slender wheatgrass
Timber danthonia	Bentgrasses
Big bluegrass	California danthonia
Canby bluegrass	Columbia needlegrass
Spike trisetum	Mountain muhly
Forbs	
All following Forbs	5-10*
American vetch	Asters
Balsamroot	Biscuitroot
Bluebells	Buckwheat
Clovers	Eriogonum
Flax	Fleabane
Green gentian	Groundsel
Hawksbeard	Lousewort
Milkvetch	Mustard
Oregon grape	Phlox
Pointvetch	Pussytoes

Technical Guide, Section IIB  
Major Land Resource Area (43,46,48A,49)  
20"+ High Mountains (20+M)

Sandwort	Stonecrop	
Stoneseed	Sunflower	
Western yarrow		
Woody Plants		
Bi tt erbru sh		5-1 0
All following Woody Plants	5-15*	
Big sagebrush	Snowberry	
Chokecherry	Serviceberry	

\*Of plants in these groups, no more than 5% of any species is allowable in the potential plant community.

c. Density of herbage cover by ocular estimate may vary from 15 to 25 percent.

d. Species that are not a part of the climax plant community, but are most likely to invade this site if condition declines are cheatgrass, annual weeds, houndstongue, mulesear, dock, and mustard. Increasing forbs, Sandberg bluegrass, and big sagebrush become more dominant as conditions deteriorate.

4. Total Annual Production in Excellent Condition (Pounds per Acre Air-dry Weight)

Favorable years	- 1,000
Medium years	- 800
Unfavorable years -	600

5. Soils:

a. The soils of this site are generally less than 10 inches deep, but will include areas of exposed bedrock and pockets of deep soil. Bedrock may be fractured which allows brush species to grow. Bedrock includes all kinds except igneous and soft clay shales. Soils are well-drained. Infiltration and internal water movement are good above the bedrock. Roots penetrate the soil material readily above the bedrock and to a very limited extent into rock fractures. Water holding capacity is low due to shallow depth and coarse fragment content of the profile. Runoff will occur on these soils because of soil depth limitations, and water storage capacity.

b. Soil taxonomic units which characterize this site are:

c. Complete soils descriptions are available in the soil survey descriptive legend.

B. MAJOR USES AND INTERPRETATIONS FOR:

1. Grazing - This site is predominantly grasses and woody plants with a small amount of forbs. Because of its upland position and steep slopes, sheep are more adapted for grazing in the summer and fall.

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Major Land Resource Area (43,46,48A,49)  
20"+ High Mountains (20+M)

2. Wood Products - None.
3. Wildlife - See attached description.
4. Watershed (Hydrologic Interpretations)-This range site has a potential for high runoff. The soil cover complex numbers are:

Excellent	85
Good - high fair	90
Fair	95

(See Section 4, SCS National Engineering Handbook for runoff quantities and hydrologic curves.)

5. Recreation and Natural Beauty -This site has a few forbs which have flowers in bloom throughout spring and summer. It is a fair to good area for elk and deer hunting, and has fair potential for skiing and snowmobiling.
6. Threatened or endangered plants and animals - See wildlife description.
7. Location of Typical Examples of This Site (To be determined at the local field offices.)
8. Other Pertinent Information

GUIDE TO SUGGESTED INITIAL STOCKING RATE

Condition Class Percent Climax Vegetation AUM's/Acre Acres/AUM

Excellent	76 - 100	0.35	2.8
Good	50 - 75	0.27	3.7
Fair	26 - 50	0.15	6.7
Poor	0 - 25	0.08	12.5

RELATIVE FORAGE QUALITY OF PLANTS FOR ANIMAL USE-(See Attached Sheet)

9. Field Offices - Afton, Baggs, Buffalo, Casper, Cody, Cokeville, Douglas, Dubois, Greybull, Jackson, Kaycee, Lander, Laramie, Lovell, Pinedale, Powell, Riverton, Saratoga, Sheridan, Thermopolis, Worland

Technical Guide, Section IIB  
Major Land Resource Area (43,46,48A,49)  
20"+ High Mountains (20+M)  
IGNEOUS Ig  
Correlated Range Site No.043XY116WY

RANGE SITE DESCRIPTION

A. PHYSICAL CHARACTERISTICS

1. Physiographic Features -This site occurs in an upland position. It is found on all exposures, but most commonly on south and west facing slopes and ridge tops. Slopes vary from 570%, but are most commonly 30-550. Elevations range from 8,200 to over 12,000 feet.

2. Climatic Features - See attached climatic description.

3. Native (climax) Vegetation

a. The climax plant community is dominated by plants which can survive with severe root depth limitations, droughty conditions and neutral to acid soils. Potential vegetation is about 65% grasses and grass-like plants, 10% forbs, and 25% woody plants.

b. Plant species and percentages found in the climax plant community by air-dry weight are:

SPECIES	PERCENT
Grasses and Grass-like Plants	
Bluebunch wheatgrass	30-40
Big bluegrass	T-10
Timber danthonia	T-10
All following Grasses and Grass-like Plants	10-20*
Columbia needlegrass	Idaho fescue
Letterman needlegrass	Mountain muhly
Mutton bluegrass	One-spike danthonia
Oniongrass	Prairie junegrass
Spike fescue	Thickspike wheatgrass
Bentgrasses	California danthonia
Canby bluegrass	Mountain brome grass
Spike trisetum	
Forbs	
All following Forbs	5-15*
American vetch	Aster
Balsamroot	Bluebells
Buckwheat	Clovers
Eriogonums	Fleabane
Hawksbeard	Milkvetch
Oregon grape	Phlox
Pointvetch	Pussytoes
Stonecrop	Stoneseed
	Western yarrow

Technical Guide, Section IIB  
Major Land Resource Area (43,46,48A,49)  
20"+ High Mountains (20+M)

Woody Plants

Black sagebrush	5-10
Three-tip sagebrush	5-10
All following Woody Plants	5-15*
Snowberry	Big sagebrush
Bitterbrush	

\*Of plants in these groups, no more than 5% of any species is allowable in the potential plant community.

c. Density of herbage cover by ocular estimate may vary from 15 to 25 percent.

d. Species that are not a part of the climax plant community, but are most likely to invade this site if condition declines are cheatgrass, annual weeds, houndstongue, knotweed, mulesear, mullien, and mustard. Increasing woody plants and forbs, including big sagebrush, snowberry, and Oregon grape, become more dominant as conditions deteriorate.

4. Total Annual Production in Excellent Condition (Pounds per Acre Air-dry Weight)

Favorable years	- 800
Medium years	- 650
Unfavorable years	- 500

5. Soils:

a. The soils in this site are stony or cobbly, and usually less than 10 inches in depth over igneous or volcanic bedrocks. Some pockets of deep soil on areas of exposed bedrock may be included in this site. Infiltration and internal water movement are good above the bedrock. Roots penetrate the soil material readily above the bedrock and to a very limited extent into rock fractures. Water holding capacity is low due to shallow depth and coarse fragment content of the profile. Runoff will occur on these soils because soil depth limits water storage capacity.

b. Soil taxonomic units which characterize this site are:

c. Complete soils descriptions are available in the soil survey descriptive legend.

B. MAJOR USES AND INTERPRETATIONS FOR:

1. Grazing - This site is predominantly grasses and woody plants with a small amount of forbs. Because of its upland position on steep slopes, sheep are more adapted for grazing in summer and fall.

2. Wood Products - None.

3. Wildlife - See attached description.

4. Watershed (Hydrologic Interpretations)-This range site has a potential for high runoff. The soil cover complex numbers are:

Excellent	75
Good - high fair	80
Fair	90

(See Section 4, SCS National Engineering Handbook for runoff quantities and hydrologic curves.)

5. Recreation and Natural Beauty -This site has a few forbs which have flowers in bloom through spring and summer. It is a fair to good area for elk and deer hunting and has fair potential for skiing and snowmobiling.

6. Threatened or endangered plants and animals - See wildlife description.

7. Location of Typical Examples of This Site (To be determined at the local field offices.)

8. Other Pertinent Information

#### GUIDE TO SUGGESTED INITIAL STOCKING RATE

Condition Class Percent Climax Vegetation AUM's/Acre Acres/AUM

Excellent	76 - 100	0.3	3.3
Good	50 - 75	0.25	4.0
Fair	26 - 50	0.12	8.3
Poor	0 - 25	0.06	16.6

RELATIVE FORAGE QUALITY OF PLANTS FOR ANIMAL USE-(See Attached Sheet)

9. Field Offices - Afton, Baggs, Buffalo, Casper, Cody, Cokeville, Douglas, Dubois, Greybull, Jackson, Kaycee, Lander, Laramie, Lovell, Pinedale, Powell, Riverton, Saratoga, Sheridan, Thermopolis, Worland